CHAPTER 7 FIELD REVIEW

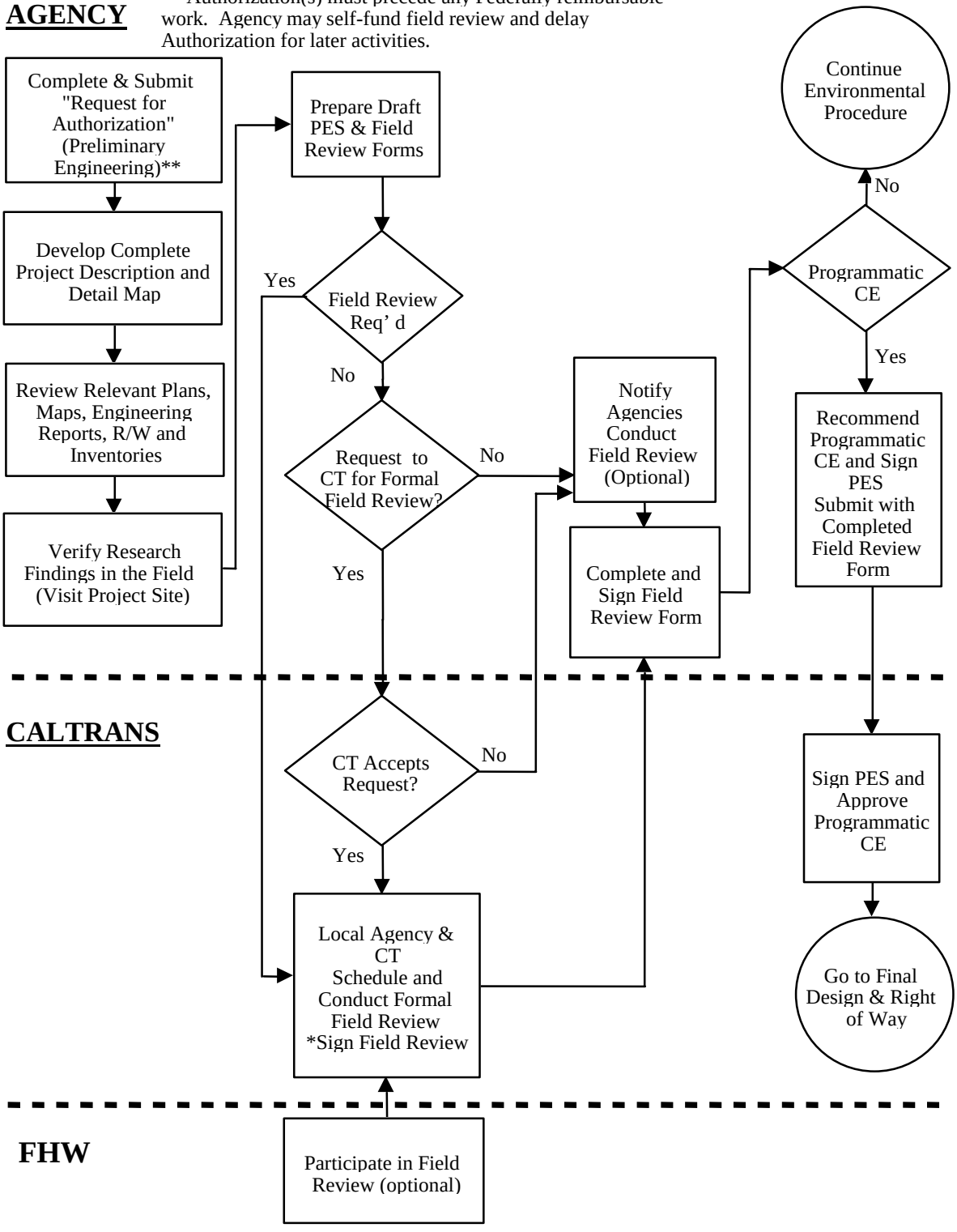
CONTENTS

FLOW CHARTS

EXHIBITS

EXHIBITS CONTINUED

Field Review Procedures For Developing Local Federal-aid Projects*



* For all state highway projects, consult the Caltrans' *Project Development Procedures Manual*, the DLAE and project manager to fully coordinate development responsibilities.

Projects on or impacting the Interstate require FHWA project by project review.

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CHAPTER 7 FIELD REVIEW

7.1 INTRODUCTION

In conjunction with the preliminary environmental investigation, an important early action in developing a local transportation project financed with federal-aid funds is the methodical and systematic collection of initial engineering and related project data and information. For this manual, this data gathering project-scoping step is called the "Field Review."

Each agency should establish a process for clearly defining the location, scope, cost, and the other parameters considered when developing a project. This step is very important in guiding the project development team to the successful production of the Plans, Specifications and Estimate (PS&E).

The field review for local agency transportation projects off the State Highway System (SHS) serves the same purpose as the Project Study Report serves for state highway projects. It is intended to bring together all interested parties and come to an agreement on the project requirements necessary to comply with federal and state laws and regulations. For local agency projects on the SHS, consult the Caltrans *Project Development Procedures Manual (*http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm), the District Local Assistance Engineer (DLAE), and the project manager to coordinate development responsibilities.

The field review process considers and documents the following actions:

- Assigns a local agency project manager to oversee the project studies, PS&E development and/or construction.
- Brings together representatives from various involved or interested agencies, including, but not limited to, the agency, Caltrans, other regional and local agencies, transit districts, other state or federal permitting agencies, public utilities, and railroads. FHWA may also be represented.
- Affords an opportunity for discussions of alternative proposals.
- Secures agreement on general design features and exceptions to American Association of State Highway and Transportation Officials (AASHTO) standards, or 3R,or local standards selected for the project.
- Identifies pedestrian facilities within the project area that will or may need to be brought up to current federal, state and/or local standards to be Americans with Disabilities Act (ADA) compliant.
- Determines if the project is a federal-aid Intelligent Transportation Systems (ITS) project. If so, determines if it is a major, or minor ITS project.
- Determines timing and costs associated with preparing and processing required technical studies and the NEPA document (see "Environmental Procedures" included in Chapter 6, Environmental Procedures of the Local Assistance Procedures Manual (LAPM) and Caltrans *Standard Environmental Reference* [SER] at this website: http://www.dot.ca.gov/ser/vol1/vol1.htm).
- Determines right of way and relocation assistance requirements.

- Discusses and evaluates proposed funding, eligibility requirements, and federal or state participation.
- Determines who advertises, awards, administers (AAA), and maintains the proposed project.
- Defines the project schedule and target advertising date.
- Discusses value analysis; if appropriate (required for NHS projects with an estimated cost of $25 million or more. For more information on this subject, please see Chapter 12 "Plans, Specifications & Estimate," Section 12.5 "Value Analysis" of this manual.).

7.2 TYPE AND REQUIREMENT FOR FIELD REVIEW

The type of field review chosen for a project depends on many factors including: highway system, project type (State-Authorized or FHWA Full Oversight on Interstate projects), project complexity, total cost and type of funds. The two types of field reviews are formal and informal.

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FORMAL FIELD REVIEW

A formal field review can be accomplished by:

- A site (field) inspection, or
- An office meeting, or both.

All parties involved in the project development decisions should be invited to a formal field review. The DLAE should take the lead in the field reviews, take Minutes of the Field Review and circulate the notes to all affected parties afterward.

INFORMAL FIELD REVIEW

Informal field reviews can be accomplished by:

- Small group meetings
- Interagency correspondence
- Phone discussions
- Individual research and data gathering

Exception: Emergency Relief (ER) projects use the FHWA Damage Assessment Form (DAF) in lieu of any other field review form. An on-site field assessment is required for all these projects.

REQUIRED REVIEW

Caltrans will determine, if a field review is required for all projects on the National Highway System (NHS). Generally, a field review will only be required for major NHS projects. A project will be considered to be major if:

- The total cost is over $10 million, or
- It involves an unusual structure (see definitions in Section 2.4 of this manual), or
- It involves multiple projects on a corridor involving more than one agency, or
- Any other complicating factors require a field review.

All required reviews would be formal. In consultation with the local agency, the Caltrans DLAE determines how the formal field review will be accomplished.

Exceptions to the above are as follows:

- A site visit, or "early coordination meeting" may be required, on the grounds of environmental sensitivity for protected resources, controversy, or consequences (impacts) of the proposed action (see Chapter 6, "Environmental Procedures"). This meeting may be part of the formal or informal field review discussed in this chapter or held separately.
- For seismic safety retrofit projects, a field review is mandatory as described in Section 7.8 of the *Local Assistance Program Guidelines* (LAPG*)*

PS&E AND CONSTRUCTION ADMINISTRATION PROCEDURES

When Caltrans requires a field review for major NHS projects, PS&E and construction administration procedures (standards, agencies involved, use of consultants, project management, value analysis, specifications, materials testing, etc.) will be discussed. The PS&E procedures will be put in writing for Caltrans' and FHWA's approval before the local agency starts final design (see Chapter 12, *Plans, Specifications & Estimate* of the LAPM).

The construction administration procedures will also be put in writing. The procedures must be approved by Caltrans and FHWA before construction will be authorized (see Chapter 15, *Advertise and Award Project* of the LAPM).

NHS projects that are not considered "major" will not require these approvals.

OPTIONAL REVIEW

A field review is optional for all projects off the NHS (non-NHS). The field review is also optional for all NHS projects determined by Caltrans to be minor in nature. It is a suggested practice for all projects.

7.3 NOTIFICATION

The local agency contacts the DLAE to discuss when and how they wish to proceed with project implementation, if this was not already done as part of the initial project authorization process.

REQUIRED REVIEWS

For required field reviews, the DLAE determines the type of field review required and coordinates, as appropriate, with the local agency on scheduling. The DLAE notifies Caltrans and FHWA attendees. The local agency is responsible for making other review preparations and notifying other interested parties. Each attendee should receive a copy of the draft Field Review Form before the actual field review.

In addition to the district local assistance representative, Caltrans attendees, when applicable, should include an environmental reviewer, a right of way reviewer, and a representative from the Office of Structure Design (if a structure is involved). In order to optimize their value to the local agencies, these Caltrans specialists should become familiar with the project prior to attending the field reviews. Others may attend as appropriate. If the project involves a state highway, a representative from the appropriate District Project Development or Traffic Branch must be contacted to determine their involvement in the project development, and the need for a Project Report and encroachment permit.

A representative from FHWA should be consulted for all projects on the NHS for which FHWA has Full Oversight, and those which may require an environmental document more complex than a Programmatic Categorical Exclusion (PCE). Request for FHWA consultation should be coordinated through the DLAE (see Chapter 2, *Roles and Responsibilities* and Chapter 6, *Environmental Procedures,* for further details).

OPTIONAL FIELD REVIEWS

For projects that Caltrans has determined, a field review is not required. The local agency is responsible for deciding whether to perform a field review (formal or informal) and for notifying all potentially affected agencies, utility companies, etc. and making arrangements for any on-site or office meetings. In deciding whether and how to conduct a review, an agency should consider the following factors: functional classification, project type and State-Authorized/FHWA Full Oversight status, project complexity, total cost, interested, and affected parties and type of funds.

If a local agency wishes Caltrans (or FHWA) staff to participate in the field review process, a request must be made to the DLAE. Caltrans' participation is based on the following factors:

- Availability of Caltrans staff and time requirements
- Experience of local agency staff
- Complexity of project, type of structures
- Funding program
- Environmental, right of way and design issues

For railroad crossing projects, the PUC participates in the review process.

Discussions with the DLAE should also indicate whether Caltrans' participation in any subsequent phases of the project is expected. This is especially important if PS&E reviews are needed for structures. Caltrans and the agency should reach a clear agreement early in the process on the extent of Caltrans' staff participation in any phase of project development.

7.4 TENTATIVE PLANS

The local agency should have a tentative plan as well as horizontal and vertical alignment sketches available for review by participants, either prior to, or at the field review. On projects that involve bridges, the agency should also provide preliminary hydrologic and hydraulic data (see Exhibit 11-D). This information need not be in great detail, but sufficient to make an engineering review of the proposal.

7.5 PREPARATION OF FIELD REVIEW FORM

The local agency shall prepare and complete the Field Review Form (Exhibit 7-B [or DAF for ER projects]) for all federal-aid projects, even if a Field Review were not required. (For ER projects, the DAF is used in lieu of the Field Review Form-see Chapter 11 of the LAPG) The field review form documents the results and decisions of the field review and other initial project research. It also provides data necessary to prepare the "Request for Authorization" and the Program Supplement Agreement.

The field review process and documents should be completed, as early as possible. For HBRR funded (Bridge) projects, the field review documents, including major structure data sheets, must be completed prior to any request for authorization. For other types of projects, authorization for preliminary engineering may be granted prior to submittal of the field review to Caltrans when federal reimbursement is needed, to hire consultants or others in order to obtain information needed to complete the field review. The field review document must be completed and submitted prior to, or concurrently with the first occurrence of either step below:

- Initial submittal of the PES form (completed and with supporting information attached) for Caltrans and/or FHWA approval (see Chapter 6, "Environmental Procedures")
- Submittal of the Agreements Checklist requesting a Supplemental Agreement

FIELD REVIEWS ATTENDED BY CALTRANS AND THE FHWA

For projects on the NHS, early review and discussions should be held with the DLAE and the FHWA engineer. Similar early discussions should occur for HBRR funded (Bridge) projects to ensure funding eligibility.

If a field review is required, Caltrans and the FHWA will attend. Caltrans and the FHWA may also attend optional field reviews if requested. The local agency shall fill out the Field Review Form as completely as possible prior to the field review, and send a copy with a location map to each of the interested parties attending the field review. This allows the participants to come to the meeting prepared to discuss the specific issues and methodologies, which can lead to successful project implementation. The earliest date for the field review should be two weeks after the receipt of the draft Field Review Form by the district. Copies for the FHWA, Division of Local Assistance, and Office of Structure Design must be submitted to the district for further transmittal.

Caltrans has delegated design exception approval authority to the City/County Public Works Director (see Chapter 11, "Design Standards" of this manual). However, proposed design exceptions should be identified and discussed at the field review.

The Field Review Form should be updated and signed by the local agency, district, and FHWA representatives, as appropriate, at the field review even if some of the questions remain unanswered. Information determined after the field review is to be provided by the local agency as a supplement to the Field Review Form and may require FHWA concurrence.

OPTIONAL FIELD REVIEWS NOT ATTENDED BY CALTRANS OR THE FHWA

If the field review is optional and Caltrans and the FHWA will not be attending, the local agency may complete the Field Review Form without a formal or informal review or meeting. An on-site visit by the project engineer and project manager is recommended as good practice to verify the data and information used to complete the forms. The forms should be transmitted to the DLAE as soon as they are complete.

7.6 FIELD REVIEW DATA

SCOPE

The project must be defined in sufficient detail to accurately specify where it is, why it is necessary and what will be done. This process of project definition began with the planning and programming process. Now, further details are needed to clarify the limited FSTIP information with the specific project location, system and conditions as they currently exist and as they will be upon project completion. If the scope changes significantly from the approved FSTIP description, now or at any time during project development, a FSTIP amendment may be necessary. Items 1 to 5 on the "Field Review Form" (Exhibit 7-B) and Exhibits 7-C ("Roadway Data"), 7-D ("Major Structure Data"), 7-E ("Railroad Grade Crossing Data"), vicinity maps, typical

section(s), alternative sketches, signal warrants, and collision diagrams, as appropriate, provide data related to the general scope of the project. For non-roadway projects, the Field Review Form and attachments would be modified as appropriate for the project activity and scope, e.g., site plans, work plans, building sketches.

ENVIRONMENTAL PROCESS

All federal-aid projects must undergo a documented environmental review and receive a federally approved environmental document before proceeding to final design, right of way acquisition or construction. The documentation of how the decision was made to perform a particular technical study or recommend a specific class of action (CE, EA, EIS) under NEPA is equally as important as environmental approval. Environmental requirements and procedures for processing required technical studies and the NEPA document are discussed in Chapter 6 of this manual. Specific information regarding the format and content of required technical studies and NEPA documents (CE, EA, EIS) is contained in the SER.

The "Preliminary Environmental Study (PES) Form," Exhibit 6-A is designed to identify:

- The existing condition of the project area
- The potential existence of sensitive environmental resources within the project area
- Required technical studies
- The responsible or regulatory agencies where early coordination or consultation is necessary or where approvals and permits are needed

RIGHT OF WAY

The need to acquire right of way or relocate utilities can significantly affect project development, especially costs and scheduling. Activity within Caltrans right of way requires coordination and an encroachment permit. Federal laws and regulations must be followed if there is FHWA participation in any project phase, whether in R/W phase or only in the construction phase**.** The acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended (42 US Code 4801, et. seq.). Item 7 of the "Field Review Form" (Exhibit 7-B) highlights the possible right of way activities with a cost estimate breakdown. The need for utility relocation should be identified.

PROJECT COST

Good initial estimates are needed to define whether there are sufficient funds available to implement the project. Item 7 of the Field Review Form provides for an overview by phase and anticipated Federal participation. Item 8 can be used to further break this down by federal fund type and state funding. State or local funds are normally required to match the federal funds. To the greatest extent possible, FHWA funded projects should be funded at the full federal participating ratio (see Chapter 3, "Project Authorization," Section 3.2, "Underfunding Policy").

PROJECT ADMINISTRATION

The agency submitting the request is normally responsible for administering all phases of the project. If another arrangement is expected, this should be noted. If the agency plans to hire a consultant to assist with any phase, this should be noted. This

allows the agency to work sufficient time into their schedule for consultant selection (see Chapter 10, "Consultant Selection"). If the state is expected to administer any phase or to review the PS&E, hold early discussions with the appropriate Caltrans district to ensure that the required staff is available when needed. A cooperative agreement is needed to define work and cost sharing responsibilities.

PROJECT SCHEDULE

A federal project is normally scheduled for a specific year in the FHWA approved FSTIP document. While the funds are usually carried forward into new FTIP and FSTIP adoptions, this is at the discretion of the MPO. For State funded projects, the specific program guidelines define the year or years the program funds are available. The delivery schedule for advertising should be reviewed to see if the project could be developed in a timely manner. The items discussed above define some of the critical steps in this effort. For federally funded projects, if there will be significant delays, the agency should work with the MPO to reschedule the work through a current FSTIP amendment or into the next FSTIP. State program guidelines define the appropriate actions for the State funded projects. In non-MPO areas, contact the Caltrans District FSTIP coordinator for necessary amendments.

7.7 SUBMITTAL OF FIELD REVIEW FORM

As soon as formal or informal discussions and review are complete, the local agency prepares the final Field Review Form and attachments (see Section 7.5 above for the latest times for completion). If a field review is required for NHS projects, all appropriate forms and attachments shall be completed. If the field review is optional, the two page Field Review summary (Exhibit 7-B) must be completed, as a minimum. See the brackets ("[ ]") notation under Item 12 of Exhibit 7-B for additional attachments.

The local agency consults with the district regarding the number of copies to be sent. The district forwards a Field Review Form (two if a bridge is involved) with the required attachments to the Division of Local Assistance. The local agency may wish to provide copies to their MPO and other interested parties.

The project engineer and project manager should periodically review the Field Review Form and data to ensure that the project development is proceeding as initially proposed or that significant changes have been approved.

The field review document must be completely filled out and submitted prior to or concurrently with the first occurrence of either step below:

- Initial submittal of the PES form (completed and with supporting information attached) for Caltrans and/or FHWA approval (see Chapter 6, "Environmental Procedures")
- Submittal of the Agreements Checklist requesting a Supplemental Agreement

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INSTRUCTIONS FOR FIELD REVIEW FORM

The Applicant shall complete the Field Review Form in accordance with Chapter 7, "Field Review" of this manual. The District Local Assistance Engineer (DLAE) should be consulted for clarification. If Caltrans or other interested parties are to be involved in meetings, to assist in completion, the applicant should fill out the form as completely, as possible prior to any meeting(s). The form must be completely filled out prior to submission of the PES Form.

Item 1. PROJECT LIMITS

Briefly describe the physical limits or nature of project. Attach a list, as needed, for multiple or various locations. Indicate length of project to nearest one-tenth of mile. Use 0.1, if a spot location. Include additional sheets, if needed, to clearly define the project location or scope of work.

Item 2. WORK DESCRIPTION

Briefly describe major components of the proposed work, e.g., signals, bridge replacement, ridesharing, pedestrian features, etc.

Item 3. PROGRAMMING DATA

All federal-aid funded projects (except Emergency Relief [ER], unless additional capacity is being added) are required to be on the most current FHWA/FTA approved FSTIP. If project is within an MPO area, indicate the MPO or RTPA's FTIP[1] that includes project and the fiscal years of FTIP. Also list the page of FTIP or Amendment Project Planning Number (PPNO), if available and FHWA/FTA approval date. For non-MPO areas include same information from FSTIP.

Indicate the federal funds and phases listed in the FTIP/FSTIP. For CMAQ projects name the Air Basin.

Item 4. FUNCTIONAL CLASSIFICATION

For a roadway project, check appropriate functional classification category. See the discussions of specific fund programs in the *Local Assistance Program Guidelines* (LAPG*)* for system eligibility. Indicate N/A for projects not related to a specific road or street system.

Item 5. STEWARDSHIP CATEGORY

For roadway projects, indicate if project is on the National Highway System (NHS), and whether project is State-Authorized or a FHWA Full Oversight project on the Interstate per stewardship agreement. With some exceptions, projects on the State Highway System are subject to Caltrans Oversight, and on the Interstate are subject to FHWA Full Oversight; otherwise, the project is subject to DLAE oversight. Refer to Figure 2-1, "Required FHWA Oversight Federal-Funded Projects" in Chapter 2 of this manual.

Item 6. CALTRANS ENCROACHMENT PERMIT REQUIRED

An encroachment permit is required for projects encroaching within the state highway right of way. The applicant should contact the District Permit Officer early in the process.

[1] The FTIP must be incorporated into an FHWA approved FSTIP.

Item 7. COST BREAKDOWN ESTIMATE

List estimated breakdown of all project phases and indicate phases for which federal participation will be requested. Include all known costs, but include each cost in only one group. (For structures related projects financed with Highway Bridge Replacement and Rehabilitation [HBRR] funds; the current HBRR operating procedures limit preliminary engineering costs, including environmental costs to 25% of the total construction cost. Any exceptions must be approved in writing by the HBRR program manager.)

Item 8. PROPOSED FUNDING

Fill in total cost of federal-funded project, type, and amount of federal-aid funds, i.e. STP, CMAQ, etc., and the matching-fund breakdown.

If state funds are involved, indicate source such as STIP.

Item 9. PROJECT ADMINISTRATION

Indicate name of agency that will be responsible for administering each project phase. Also indicate the use of a consultant for any phase. Indicate if Caltrans' review of PS&E will be requested. If Yes, begin discussions with DLAE on availability of staff. All PS&E documents to be reviewed must be in Caltrans format.

Item 10. SCHEDULES

The local agency should indicate their proposed advertisement date. This will give the involved parties a date for scheduling. However, the discussion of requirements and time frames may require adjustment of the advertisement date. Critical dates in the schedule should be noted in the remarks.

ITEM 11. PROJECT MANAGER'S CONCURRENCE

The local agency project manager shall sign and date the field review form to signify agreement on the parameters proposed for development of the project. The DLAE and FHWA representative shall sign the document when attending field reviews. This document is then a guidance reference for further development of the project to assure that it adheres to the programmed concept, or that any changes is approved by the manager (and/or DLAE and FHWA, if appropriate).

Item 12. LIST OF ATTACHMENTS

The first two items are appropriate for all reviews. Others to be added depend on the type of project. For required field reviews, all applicable attachments must be submitted. For optional field reviews, see the "[ ]" notations for attachments required for specific types of projects. All existing federal, state, or local Americans with Disabilities Act (ADA) deficiencies, if not identified on other Attachments, should be listed here

Note: The Federal Damage Assessment Form (DAF) shall be used as the field review document for Emergency Relief projects.

FIELD REVIEW FORM

Local Agency _____ Field Review Date _____
Project Number _____ Locator _____
(Dst/Co/Rte/PM/Agncy)
Project Name _____ Bridge No.(s) _____

1. PROJECT LIMITS (see attached list for various locations) _____
_____
_____ Net Length_____ (mile)
2. WORK DESCRIPTION _____
_____
ITS project or element: Yes____ No____ If yes, is it a Major ITS ___ or a Minor ITS_____
3. PROGRAMMING DATA FTIP (MPO/RTPA) _____ FY _____ Page _____
Amendment No. _____ FTIP PPNO _____ FHWA/FTA Approval Date _____
Federal Funds $ _____ Phases PE _____ R/W _____ Const _____
Air Basin: _____ (CMAQ only)
4. FUNCTIONAL CLASSIFICATION:

URBAN__		RURAL__	
Principal Arterial:	___	Principal Arterial:	____
Minor Arterial:	____	Minor Arterial:	____
Collector:	____	Major Collector:	____
Local:	____	Minor Collector:	____
		Rural Local:	____

5. STEWARDSHIP CATEGORY
FHWA Full Oversight (Stewardship): Yes _ No_
State-Authorized (Stewardship): Yes _ No_ (a) DLAE oversight: Yes ___ No___
(b) District Construction oversight: Yes ___ No___
ITS project or element requiring FHWA oversight per stewardship: Yes ___ No___
6. CALTRANS ENCROACHMENT PERMIT Is it required? Yes___ No___
7. COST ESTIMATE BREAKDOWN

	(Including Structures)	$1,000's	Fed. Participation	
PE	Environmental Process	_____	Yes___	No___
	Design	_____	Yes___	No___
	System Manager/Integrator	_____	Yes___	No___
CONST	Const. Contract	_____	Yes___	No___
	Const. Engineer.	_____	Yes___	No___
R/W	Preliminary R/W Work	_____	Yes___	No___
	Acquisition:		Yes___	No___
	(No. of Parcels ____)	_____	Yes___	No___
	(Easements ____)	_____	Yes___	No___
	(Right of Entry ____)	_____	Yes___	No___
	RAP (No. Families)	_____	Yes___	No___
	RAP (No. Bus. ____)	_____	Yes___	No___
	Utilities (Exclude if included in contract items)	_____	Yes___	No___

_____
TOTAL COST $ _____

8. PROPOSED FUNDING

		Total Cost		Cost Share	
Grand Total		$ _____			
Federal Program	#1_____	$ _____ Fed.	$_____	Reimb. Ratio	_____
(Name/App. Code)	#2_____	$ _____ Fed.	$_____	Reimb. Ratio	_____
Matching Funds Breakdown	Local:	.	$_____	_____%	
	State:		$_____	_____%	
	Other:		$_____	_____%	

State Highway Funds? Yes _____ Source _____ No _____
State CMAQ/RSTP Match Eligible Yes_____ No _____ Partial _____
Is the Project Underfunded? (Fed $ < Allowed Reimb.) Yes _____ No ___

9. PROJECT ADMINISTRATION

		Agency	Consultant	State
PE	Environ Process	_____	_____	_____
	Design	_____	_____	_____
	System Man./Integ.	_____	_____	_____
R/W	All Work	_____	_____	_____
CONST ENGR	Contract	_____	_____	_____
CONSTRUCTION	Contract	_____	_____	_____
MAINTENANCE		_____		_____

Will Caltrans be requested to review PS&E? Yes____ No____

10. SCHEDULES: PROPOSED ADVERTISEMENT DATE _____
Other critical dates: _____
_____

11. PROJECT MANAGER'S CONCURRENCE

Local Entity _____ Date: _____

Signature & Title _____ Phone No. _____

Is field review required? Yes _____ No _____

Caltrans (District): _____ Date: _____

Signature & Title: _____

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12. LIST OF ATTACHMENTS (Include all appropriate attachments if field review is required. See the "[ ]" notation for minimum required attachments for non-NHS projects)

_____ Field Review Attendance Roster or Contacts Roster
_____ Vicinity Map (Required for Construction Type Projects)

IF APPLICABLE (Complete as required depending on type of work involved)

_____ Roadway Data Sheets [Req'd for Roadway projects]
_____ Typical Roadway Geometric Section(s) [Req'd for Roadway projects]
_____ Major Structure Data Sheet [Req'd for HBRR]
_____ Railroad Grade Crossing Data Sheet
_____ Airport Data Sheet (if within 10,000 feet)
_____ Sketch of Each Proposed Alternate Improvement
_____ TE Application Document
_____ Existing federal, state, and local ADA deficiencies not included on other Attachments.

___ Signal Warrants
____ Collision Diagram
____ Protection of Wetlands Statement
____ CMAQ/RSTP State STIP Match
___ Systems Engineering Review Form (SERF) (Req'd for ITS projects)

13. DLAE FIELD REVIEW NOTES:

A. MINUTES OF FIELD REVIEWS

B. ISSUES OR UNUSUAL ASPECTS OF PROJECT

(Attachment to Field Review Form)

Distribution: Original with attachments – Local Agency
Copy with attachments (2 copies if HBRR) - DLAE

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ROADWAY DATA

1. TRAFFIC DATA

Current ADT ____ Year 200 __ Future ADT _____ Year 200___ DHV ____ Trucks __%
Terrain (Check One) ____ Flat _____ Rolling ____ Mountainous
Design Speed _____
Proposed Speed Zone ____ Yes mph _____ ____ No

2. GEOMETRIC INFORMATION

ROADWAY SECTION

Facility	Year Constr.	Min. Curve Radius	Thru Traffic Lanes			Shoulders		Median Width
			No. of Lanes	Total Width	Type	Each Width Lt/Rt	Type	
Exist.								
Prop.								
Min. Stds. selected: AASHTO____ 3R ____ Local ____								
	N/E Contig. Sect.							
	S/W Contig Sect.							

Remarks (If design standard exception is being sought, cite standard and explain fully how it varies):
_____
_____

3. DEFICIENCIES OF EXISTING FACILITY (Mark appropriate one(s))

_____ Pavement Surface
_____ Alignment
_____ Crossfall
_____ Pavement Structure
_____ Drainage
_____ Bridge
_____ Safety (Attach collision diagram or other documentation)
_____ Federal Americans w/ Disabilities Act (ADA), State or Local accessibility requirements
_____ Other (describe below)

Remarks _____
_____

4. TRAFFIC SIGNALS ____Yes ___New (attach warrants) ___Modified _____No

5. MAJOR STRUCTURES Structure No.(s) _____ (attach structure data sheet)
_____

6. OTHER TRANSPORTATION FACILITIES (Name)

_____ None
_____ Railroad _____ (attach railroad data sheet)
_____ Airports _____ (attach airport data sheet)
_____ Transit _____
_____ Bicycle _____

7. AGENCIES AFFECTED

Utilities [mark appropriate one(s)] _____ Telephone _____ Electrical _____ Gas
_____ Water _____ Irrigation
_____ Other _____ Sanitary

Major Utility Adjustment: _____
_____

High Risk Facilities: _____
_____

Other: _____
_____

Remarks: _____
_____

(Attachment to Field Review Form)

MAJOR STRUCTURE DATA

(Attach a separate sheet for each structure)

Project Number _____

Bridge Name (facility crossed) _____

State Br. No. _____ Date Constructed _____ Historical Bridge Inv. Category _____

Road Name _____ Location _____

STRUCTURE DATA

	Existing	**Proposed**	**Minimum AASHTO Standards**
Structure Type	_____	_____	_____
Structure Length	_____	_____	_____
Spans (No. & Length)	_____	_____	_____
Clear Width (Curb to curb)	_____	_____	_____
Shoulder Width	_____Lt _____Rt	_____Lt _____Rt	_____Lt _____Rt
Sidewalks or bikeway width	_____Lt _____Rt	_____Lt _____Rt	_____Lt _____Rt
Total Br. Width	_____	_____	_____
Total Appr. Rdwy. Width	_____	_____	_____

1. Preliminary Engineering by _____
2. Design by _____
3. Foundation Investigation by _____
4. Hydrology Study by _____

Detour, Stage construction, or Close Road _____

Length of Detour _____

Resident Engineer for Bridge Work: ____ Agency ____ Consultant (On Retainer as City/County Engineer)

Responsible Local Official _____

Discuss any special conditions; for example, federal ADA, state or local accessibility requirements, or proposed design exceptions.

_____
_____
_____

ESTIMATED STRUCTURE AND RELATED COSTS:

		Federally Participating	
Bridge Cost		**Yes**	**No**
Construct Bridge	_____	_____	_____
Bridge Removal	_____	_____	_____
Slope Protection	_____	_____	_____
Channel Work	_____	_____	_____
Detour - Stage Construction	_____	_____	_____
Approach Roadway	_____	_____	_____
Preliminary Engineering	_____	_____	_____
Construction Engineering	_____	_____	_____
Right of Way Costs	_____	_____	_____
Utility Relocation	_____	_____	_____
Mobilization	_____	_____	_____
Total	_____		

Type of HBRR funds: Check one (Major type if more than one)

- ☐ Seismic/Voluntary (88.53% Fed. Share)
- ☐ Rehabilitation (80%)
- ☐ Replacement (80%)
- ☐ Railing (88.53%)
- ☐ Painting (88.53%)
- ☐ Painting (80%)
- ☐ Special (80%)
- ☐ Low Water Xing (80%)

Summarize HBRR funded costs of above estimate: (HBRR Federal-aid + local match for HBRR only)

Indicate the estimated date for Federal-aid Authorization & Obligation or Check the box:

		Date:	
Prelim. Eng.	$_____	_____	☐ Not needed for this project
Right of Way	$_____	_____	☐ Not needed for this project
Construction.	$_____	_____	☐ Not needed for this project
Total	$_____		

Remarks _____
_____
_____

******* The following must be attached if the project is funded by the HBRR Program:**

1. Plan view of proposed improvements.
2. Typical Section.

******* The following is recommended:**

1. Right of way map to determine whether right of way acquisition or construction easements are necessary.

(Attachment to Field Review Form)

RAILROAD GRADE CROSSING DATA

(Separate Sheet for each crossing)

Project Number /Name: _____

Name of Railroad: _____

Location (Road, City, or County, and Xing No.): _____

Vehicular Traffic: Daily Traffic using crossing ____ No. of Lanes _____ Speeds (mph) _____

No. of Exist. Tracks: Main Line _____ Branch Line _____ Passing _____ Other _____

No. of Future Tracks: _____ No. of Daily Trains; Passenger ____ Freight ____ Total _____

Maximum Speeds: Passenger _____ Freight _____

Protection in Place: _____

Protection Proposed: _____

Skew of Xing _____ Min. Sight Dist. (along track when driver is 100 feet from Xing) _____

Trains at Night? (Y/N) _____ Seasonal Train Traffic? (Y/N) _____

Ten-Year Accident Record Accidents _____ Killed _____ Injured _____

Has local agency requested or received PUC decision concerning:

Crossing Protection required: _____
_____

Protective devices proposed by local agency: _____
_____

Proposed financing of crossing protection: _____
_____

Does local agency propose to finance automatic crossing protection as a "G" (safety) project using 100% Federal funds? _____
_____

NOTE: Attach sketch showing relationship of old and new crossing.

Remarks: _____
_____
_____
_____

Distribution: Original with attachments-Local Agency
Copy with attachments (2 copies if HBRR) - DLAE

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AIRPORT DATA

(Separate Sheet for each airport)

Agency : _____
Locator (Dist.-Co.-Route-Agcy. Abbreviation): _____
Project Number /Name: _____

NAME _____

LOCATION _____

RUNWAY
Direction _____

Distance from Project _____

SLOPE RATIO _____

FAA FORM 7460-1* _____
(Indicate status, attach if available)

REMARKS _____

_____

_____

* Notice of Proposed Construction or Alteration: Required per FAA Regulations 14 CFR, Part 77

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FIELD REVIEW ATTENDANCE ROSTER

Date _____ Project No./Name _____

Project Location _____

	Name _____ (Please Print)	_____ (Organization)	(Phone Number)
1.	_____	_____	
2.	_____	_____	
3.	_____	_____	
4.	_____	_____	
5.	_____	_____	
6.	_____	_____	
7.	_____	_____	
8.	_____	_____	
9.	_____	_____	
10.	_____	_____	
11.	_____	_____	
12.	_____	_____	
13.	_____	_____	
14.	_____	_____	
15.	_____	_____	
16.	_____	_____	
17.	_____	_____	
18.	_____	_____	
19.	_____	_____	
20.	_____	_____	

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SYSTEMS ENGINEERING REVIEW FORM

This form needs to be filled out for all ITS projects. For major all ITS projects, this completed form needs to be submitted to FHWA for review and approval prior to PE authorization (Phase 1 PE authorization).

For all major ITS projects, a System Engineering Management Plan (SEMP), which includes the seven items below, must be submitted to FHWA for review and approval prior to PE authorization for final or detailed design (Phase 2 PE authorization. The 2-phased authorization only applies to Major ITS projects.

For guidance in filling out the seven items below, see last part of this exhibit.

1. Identification of portions of the Regional ITS Architecture (RA) being implemented:

_____
_____
_____
_____

2. Identification of participating agencies roles and responsibilities:

_____
_____
_____
_____

3. Requirements definitions:

_____
_____
_____
_____

4. Analysis of alternative system configurations and technology options to meet requirements:

_____
_____
_____
_____

5. Procurement options:

_____
_____
_____
_____

6. Identification of applicable ITS standards and testing procedures:

_____
_____
_____
_____

7. Procedures and resources necessary for operations and management of the system:

_____
_____
_____
_____
_____

Address the above items to the degree possible at Field Review stage and acknowledge commitment to address during system design in the early stages of the SE process.

1. Identification of portions of the RA being implemented:

   (Identify which user services; physical subsystems, information flows, and market packages are being completed as part of the project, and how these pieces are part of the RA.)

2. Identification of participating agencies roles and responsibilities (concept of operations):

   (For the user services to be implemented: define the high-level operations of the system, including where the system will be used; functions of the system capabilities; performance parameters; the life cycle of the system; and who will operate and maintain the system. Establish requirements or agreements on information sharing and traffic device control responsibilities. The RA Operational Concept is a good starting point for discussion.)

3. Requirements definitions:

   (Based on the concept of operations in 2. above, define the "what" and not "how" of the system. During early stages of the Systems Engineering [SE] process, they will be broken down into detailed requirements for eventual detailed design. The applicable high-level functional requirements from the RA are a good starting point for discussion. A review of the requirements by the project stakeholders is recommended.)

4. Analysis of alternative system configurations and technology options to meet requirements:

   (The analysis of system alternatives should outline the strengths and weaknesses, technical feasibility, institutional compatibility, and life cycle costs of each alternative. The project stakeholders should have input in choosing the preferred solution.)

5. Procurement options:

   (Some procurement [contracting] options to consider include: consultant design/low bid contractor, systems manager, systems integrator, task order, and design/build. Deciding on the best procurement option should consider the level of agency participation, compatibility with existing procurement methods, role of system integrator, and life cycle costs.)

6. Identification of applicable ITS standards and testing procedures:

   (Include documentation on which standards will be incorporated into the system design and justification for any applicable standards not incorporated. The standards report from the RA is a good starting point for discussion.)

7. Procedures and resources necessary for operations and management of the system:

   (In addition to the concept of operations in 2. above, document any internal policies or procedures necessary to recognize and incorporate the new system into their current operations and decision processes. Resources necessary to support continued operations, including staffing and training must also be recognized early and be provided. Such resources must also be provided to support necessary maintenance and upkeep to ensure continued system viability.)

(Attachment to Field Review Form)